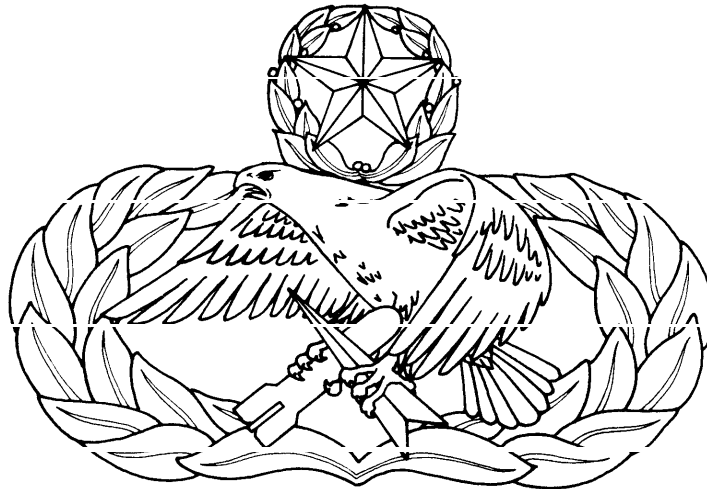


# **AFSC 2A7X2**

## **NONDESTRUCTIVE INSPECTION**



## **CAREER FIELD EDUCATION AND TRAINING PLAN**

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NONDESTRUCTIVE INSPECTION SPECIALTY  
AFSC 2A7X2  
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**CAREER FIELD EDUCATION AND TRAINING PLAN  
NONDESTRUCTIVE INSPECTION SPECIALTY  
AFSC 2A7X2**

**PART I**

*Preface*

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for the 2A7X2, Nondestructive Inspection, specialty. The CFETP will provide personnel a clear career path to success and instill rigor in all aspects of career field training. To read, review, or print a copy of the current CFETP, go to the AF/A4LF web page at: <https://afkm.wpafb.af.mil/ASPs/CoP/OpenCoP.asp?Filter=OO-LG-AF-35>

NOTE: Civilians occupying associated positions will use Part II to support duty position qualification training.

2. The CFETP consists of two parts. Supervisors will use both parts to plan, manage, and control training.

2.1. Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan. Section B identifies career field progression information, duties and responsibilities, training strategies, and career field path. Section C associates each level with specialty qualifications (knowledge, education, training, and other). Section D indicates resource constraints to accomplishing this plan, such as funds, manpower, equipment, and facilities. Section E identifies transition training guide requirements for SSgt through MSgt.

2.2. Part II includes the following: Section A contains the course objective list and training standards supervisors will use to determine if Airmen have satisfied training requirements. Section B identifies available support materials, such as Qualification Training Package (QTP) which may be developed to support proficiency training. Section C identifies a training course index that supervisors can use to determine if resources are available to support training. Included here are both mandatory and optional courses. Section D identifies MAJCOM unique training requirements supervisors can use to determine additional training required for the associated qualification needs. Section E identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training; Air Education and Training Command (AETC) conducted training, wartime course/core task and correspondence course requirements. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

3. Using guidance provided in the CFETP will ensure individuals in this specialty receive effective and efficient training at the appropriate point in their career. This plan will enable us to train today's work force for tomorrow's jobs.

## ***ABBREVIATIONS/TERMS EXPLAINED***

**Advanced Training (AT).** Formal course which provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career Airmen at the advanced level of the AFS.

### **Air Force Doctrine Development Center (AFDDEC)**

**Air Force Job Qualification Standard (AFJQS).** A comprehensive task list that describes a particular job type or duty position. Supervisors use the AFJQS to document task qualifications. The tasks of AFJQS are common to all persons serving in the described duty position.

**Career Field Education and Training Plan (CFETP).** A CFETP is a comprehensive, multipurpose document covering the entire spectrum of education and training for a career field. It outlines a logical growth plan that includes training resources and is designed to make career field training identifiable, to eliminate duplication, and to ensure this training is budget defensible.

**Certification.** A formal indication of an individual's ability to perform a task to required standards.

**Certification Official.** A person the commander assigns to determine an individual's ability to perform a task to required standards.

**Continuation Training.** This is additional training that exceeds minimum upgrade requirements and has an emphasis on present or future duty assignments.

**Contract Training.** Type 1 training that receives the same priority funding as Air Force directed training. It supports initial groups of instructors, operators, etc., that the Air Force requires for new or modified weapon systems.

**Core Task.** A task that the Air Force Career Field Manager (AFCFM) identifies as minimum qualification requirements within an Air Force Specialty regardless of duty position. Only a percentage of critical tasks for each system are listed as mandatory core tasks. This gives units needed flexibility to manage their workforce training. Tasks identified by \*/R as core tasks are optional for ANG and AFRC when training capability is not available, but must be accomplished when capability becomes available.

**Course Objective List (COL).** A publication identifying the tasks and knowledge requirements and respective standards provided to achieve a 3-7 skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations in accordance with AFI 36-2201, *Air Force Training Program*.

**Course Training Standard (CTS).** Training standard that identifies the training members will receive in a specific course not covered in the CFETP.

**Enlisted Specialty Training (EST).** A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade Airmen in each skill level of a specialty.

**Exportable Training.** Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

**Field or Mobile Technical Training.** Special or regular on-site training conducted by a training detachment (TD) or by a mobile training team (MTT).

**Initial Skills Training (IST).** A formal school course that results in the award of a 3-skill level AFSC.

**Instructional System Development (ISD).** A deliberate and orderly process for developing, validating, and reviewing instructional programs that ensures personnel are taught the knowledge and skills essential for successful job performance.

**MAJCOM Mandatory Course Listing (MMCL).** Identifies mandatory maintenance training requirements for initial technical school graduates, retrainees, and personnel with no experience on assigned mission design series (MDS) aircraft. It also ensures maintenance personnel receive training commensurate to their current duty position.

**Mission Design Series (MDS).** Aircraft (i.e., A-10, F-16, C-130).

**Occupational Analysis Report (OAR) (OSA).** A detailed report showing the results of an occupational survey of tasks performed within a particular AFS.

**On-the-Job Training (OJT).** Hands-on, over-the-shoulder training at the duty location used to certify personnel for both skill level upgrade and duty position qualification.

**Qualification Training (QT).** Actual hands-on task performance training designed to qualify an Airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skill/knowledge training required to do the job.

**Qualification Training Package (QTP).** An instructional package designed for use at the unit to qualify or aid qualification in a duty position or program or on a piece of equipment. It may be printed, computer based, or in other audiovisual media.

**Resource Constraints.** Resource deficiencies, such as money, facilities, time, manpower, or equipment, that preclude desired training from being accomplished.

**Specialized Training Package and COMSEC Qualification Training Package.** A composite of lesson plans, test material, instructions, policy, doctrine, and procedures necessary to conduct training. These packages are prepared by AETC, approved by the National Security Agency

(NSA), and administered by qualified communications security (COMSEC) maintenance personnel.

**Specialty Training Standard (STS).** An Air Force publication that describes an Air Force Specialty in terms of tasks and knowledge an Airman may be expected to perform or to know on the job. It serves as a contract between AETC and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools, Career Development Courses, and exportable courses.

**Training by Other Government Agencies (Type 5).** This training includes training conducted by the Army, Navy, Air Force agency or unit other than AETC, and other government agencies inside or outside of the Department of Defense (DoD).

**Training Setting.** The type of forum in which training is provided (formal resident school, on-the-job, field training, mobile training team, self-study, etc.).

**Upgrade Training (UGT).** A mixture of mandatory courses, task qualification, and CDCs required for award of the 3-, 5-, 7-, or 9-skill levels.

**Utilization and Training Workshop (U&TW).** A forum, co-chaired by the AFCFM and Training Pipeline Manager, of MAJCOM Air Force Specialty Code (AFSC) functional managers, Subject Matter Experts (SMEs), and AETC training personnel that determines career ladder training requirements.

## Web Site Links

ADLS	<a href="https://golearn.csd.disa.mil/kc/login/login.asp">https://golearn.csd.disa.mil/kc/login/login.asp</a>
CCAF	<a href="http://www.au.af.mil/au/ccaf/">http://www.au.af.mil/au/ccaf/</a>
CAF MCL	<a href="https://afkm.wpafb.af.mil/ASPs/CoP/OpenCoP.asp?Filter=OO-TE-AC-42">https://afkm.wpafb.af.mil/ASPs/CoP/OpenCoP.asp?Filter=OO-TE-AC-42</a>
ETCA	<a href="https://etca.randolph.af.mil/">https://etca.randolph.af.mil/</a>
HQ	<a href="https://afkm.wpafb.af.mil/ASPs/CoP/OpenCoP.asp?Filter=OO-LG-AF-35">https://afkm.wpafb.af.mil/ASPs/CoP/OpenCoP.asp?Filter=OO-LG-AF-35</a>
USAF/A4LF	
MAF MCL	<a href="https://afkm.wpafb.af.mil/ASPs/docman/DOCMain.asp?Tab=0&amp;FolderID=OO-ED-AM-91-2&amp;Filter=OO-ED-AM-91">https://afkm.wpafb.af.mil/ASPs/docman/DOCMain.asp?Tab=0&amp;FolderID=OO-ED-AM-91-2&amp;Filter=OO-ED-AM-91</a>
361 TRS	<a href="https://webm.sheppard.af.mil/361trs/index.htm">https://webm.sheppard.af.mil/361trs/index.htm</a>
367	<a href="http://www.hill.af.mil/367trss/">http://www.hill.af.mil/367trss/</a>
TRS/TRSS	
982 MXS/TST	<a href="https://webm.sheppard.af.mil/982trg/982mx/InstTech/index.html">https://webm.sheppard.af.mil/982trg/982mx/InstTech/index.html</a>

## Section A - General Information

**1. Purpose of the CFETP.** This CFETP provides the information necessary for Air Force Career Field Manager (AFCFM), MAJCOM functional managers (MFMs), commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective career field training program. This plan outlines the training that individuals in AFSC 2A7X2 should receive to develop and progress throughout their career. This CFETP identifies initial skill, upgrade, qualification, advanced, and proficiency training. Initial skills training is the AFSC specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. This training is conducted by AETC at Naval Air Station (NAS) Pensacola, FL. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion requirements for award of the 3-, 5-, 7-, 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an Airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge required to do the job. Advanced training is formal specialty training used for selected Airmen. Proficiency training is additional training, either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. The CFETP has several purposes, some are:

**1.1.** Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.

**1.2.** Identifies tasks and knowledge training requirements for each skill level in the specialty and recommends education/training throughout each phase of an individual's career.

**1.3.** Lists training courses that are available in the specialty and identifies sources of training and the training delivery method.

**1.4.** Identifies major resource constraints which impact full implementation of the desired career field training process.

**2. Use of the CFETP.** This plan will be used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available for each individual in the specialty.

**2.1.** AETC training personnel will develop or revise formal resident, non-resident, Training Detachment (TD), and exportable training based upon requirements established by the users and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies for obtaining the resources needed to provide the identified training.

**2.2.** MFMs will ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. OJT, resident training, contract training, or exportable courses can satisfy these identified requirements. MAJCOM developed training, to support this



AFSC, must be identified for inclusion in this plan and must not duplicate other available training resources.

**2.3.** Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.

**3. Coordination and Approval of the CFETP.** The AFCFM is the approval authority. The AETC training manager for AFSC 2A7X2 will initiate an annual review of this document by AETC and MFM to ensure currency and accuracy. The using MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. Use the list of courses in Part II to eliminate duplicate training.

### ***Section B - Career Progression and Information***

#### **4. Specialty Description.**

**4.1. Specialty Summary.** Refer to Air Force Enlisted Classification Directory (AFECD), paragraph 1. Nondestructive inspection is a process technique used to evaluate the integrity of a material component or structure without damaging or impairing its serviceability. Inspects aerospace weapon systems components and support equipment for structural integrity using nondestructive inspection methods and analyzes engine oil for wear metal debris. Related DoD Occupational Subgroup: 176000

**4.2. Duties and Responsibilities.** Refer to Air Force Enlisted Classification Directory (AFECD), paragraph 2.

**4.2.1. Nondestructive Inspection Apprentice and Journeyman:** Determines test method; prepares for inspection; and interprets and evaluates indications of test method applied to detect discontinuities and flaws in missile, aircraft, and aerospace ground support equipment and component parts; pressurized systems; and fluid systems. Determines test method and prepares fluids and parts for nondestructive inspection. Determines the test method best suited for the part. Prepares used engine lubricating oil and other fluid samples for spectrometric oil analysis, and evaluates test results. Performs nondestructive tests, and interprets and evaluates test indications. Performs selected test method to identify discontinuities and flaws in component parts and integrity of pressurized systems associated with missile, aircraft, and aerospace ground support equipment by examining with magnetic particle, ultrasonic, eddy current, radiographic, optical, penetrant, and other inspection methods equipment and materials. Measures thickness of materials. Performs bond testing. Interprets and evaluates indications revealed by tests. Operates and maintains nondestructive test equipment. Operates and maintains portable and fixed magnetic particle testers, fluorescent penetrant test equipment, ultrasonic test equipment, eddy current test equipment, and radiographic equipment. Operates and maintains oil analysis spectrometers. Operates and maintains Scanning Electron Microscope/Energy Dispersive X-Ray (SEM/EDX). Prepares and maintains magnetic particle baths for purity and concentration. Develops exposure charts to compute exposure data for radiographic techniques employed. Uses and maintains computed radiography imaging plates. Maintains and cleans darkroom equipment such as film holders, lead screens, reading lights, and film storage facilities. Performs silver

recovery functions. Establishes and monitors radiation areas during radiographic operations. Uses applicable Technical Orders to comply with inspection procedures. Records pertinent data in Job Data Documentation (JDD) in the Maintenance Information Systems (MIS). Recommends methods to improve equipment performance and maintenance procedures. Handles, labels, and disposes of hazardous materials and waste according to local and federal environmental standards.

**4.2.2. Nondestructive Inspection Craftsman.** Inspects Aerospace/Non-aerospace components and pressurized systems; interprets, evaluates, and utilizes trend analysis on indications of test methods. Maintains test equipment. Selects and performs nondestructive inspection by examining material parts, components, and pressurized systems of missile, aircraft, and aerospace ground support equipment. Operates and uses fluorescent liquid penetrant, eddy current, magnetic particle, radiographic, optical, ultrasonic, and other inspection methods equipment and techniques. Observes, measures, and detects discontinuities, flaws, and other defects such as cracks, inclusions, voids, blow holes, seams, and laps not discernible by orthodox visual methods. Evaluates physical state of materials such as sorting metal according to alloy, temper, conductivity, and other metallurgical factors. Evaluates surface or subsurface discontinuities, flaws, or defects in substances, and use and integrity of pressurized systems. Measures thickness of materials. Performs bond testing. Operates and maintains nondestructive test and oil analysis equipment. Interprets and evaluates indications of test method. Interprets and evaluates tests by analysis of indications such as ultrasonic wave traveling through, or being reflected or absorbed by metallic or nonmetallic material to detect discontinuities; variations in electrical characteristics and energy losses in detecting and measuring depths of discontinuities or flaws and visual results of fluorescent liquid penetrant indications. Analyzes and reports SEM/EDX analysis results. Evaluates quantity of the wear metals in fluid samples through spectrometric oil analysis. Inspects and evaluates nondestructive inspection activities. Conducts inspections of work activities and functions. Checks for compliance with technical orders, safety directives, and policy. Evaluates recommended methods to improve equipment performance and maintenance procedures.

**4.2.3. Aircraft Fabrication Superintendent.** Manages activities in accomplishing aircraft structural maintenance, low observable aircraft structural maintenance, metals technology, and nondestructive inspection. Plans, organizes, and directs aircraft fabrication maintenance, including environmentally safe practices. Establishes production controls and standards. Analyzes maintenance management reports. Determines resource requirements including equipment, facilities, and supplies. Coordinates with other activities to improve procedures and resolve problems. Directs maintenance personnel employed in removing, disassembling, inspecting, repairing, treating corrosion, reassembling, installing, testing, and modifying aircraft structural components, and local manufacturing activities. Solves aircraft fabrication maintenance and support equipment repair problems. Inspects and evaluates fabrication maintenance activities. Evaluates completed work to determine operational status and compliance with directives, policies, and work standards. Manages resources, interprets inspection findings, and recommends corrective action.

**5. Skill/Career Progression.** Adequate training and timely progression from the apprentice to the superintendent skill level play an important role in the Air Force's ability to accomplish its

mission. It is essential that everyone involved in training do their part to plan, manage, and conduct an effective training program. The guidance provided in this part of the CFETP will ensure each individual receives necessary training at appropriate points in their career. The following narrative and AFSC 2A7X2 career field table identify the skill/career progression.

**5.1. Apprentice (3) Level.** Following Basic Military Training, initial skills training will be provided in a resident course at Detachment 2, 361st Training Squadron, Naval Air Station, Pensacola, Florida. Upon completion of this initial-skills course, graduates are awarded the 3-skill level (AFSC 2A732). The course provides a foundation for additional training at the graduate's first duty assignment where trainees work with a trainer to increase knowledge and skills. Trainees utilize the career development course (CDC), task qualification training, and other exportable courses to progress in their career field. Once the trainer task certifies the trainee, the trainee may perform the task unsupervised.

**5.2. Journeyman (5) Level.** Upgrade training to the 5-skill level includes task and knowledge training. After award of the 3-skill level, trainees are enrolled in 5-level CDCs. Additionally, trainees must complete 5-skill level, upgrade training requirements (core tasks) identified in the STS. Once upgraded to the 5-level, the journeyman will enter into continuation training to broaden their experience base by increasing their knowledge and skill in troubleshooting and solving more complex problems. Five-levels may be assigned job positions such as quality assurance and various staff positions. After having 48 months in the Air Force, 5-levels will attend Airman Leadership School (ALS) to enhance their Professional Military Education (PME). Five-levels will be considered for appointment as unit trainers. Individuals will use their CDCs to prepare for Weighted Airman Promotion System (WAPS) testing. They should also consider continuing their education toward a Community College of the Air Force (CCAF) degree.

**5.3. Craftsman (7) Level.** For award of the 7-skill level, an individual must successfully complete all required 7-level training identified in this CFETP and meet 7-level minimum upgrade requirements in AFI 36-2101 and Air Force Enlisted Classification Directory (AFECD). Completion of CDC 2AX7X, Aerospace Maintenance Craftsman Course is required for 7-level upgrade. A 7-level can expect to fill various supervisory and management positions such as shift leader, element chief, shop chief, task certifier, and various staff positions. Exportable MDS specific courses and MAJCOM/unit directed courses are also available. A 7-level should take courses or obtain added knowledge in management of resources and personnel. Continued academic education through CCAF and higher degree programs is encouraged. In addition, when promoted to TSgt, individuals will attend the Noncommissioned Officer Academy.

**5.4. Superintendent (9) Level.** For award of the 9-skill level, individuals must hold the rank of SMSgt. A 9-level can be expected to fill positions such as flight chief, production supervisor, and various staff NCOIC jobs. Additional training in the areas of budget, manpower, resources, and personnel management should be pursued through continuing education. Additional higher education and completion of courses outside their career AFSC is also recommended.

**6. Training Decisions.** The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Nondestructive Inspection career

field. The spectrum includes a strategy for when, where, and how to meet these training requirements. The strategy must ensure we develop affordable training, eliminate duplication, and prevent a fragmented approach to training. The following training decisions were made at the career field utilization and training workshop held at Naval Air Station, Pensacola, Florida from 9-13 March 2009.

**6.1. Core Tasks.** During the review of the CFETP, 18 5-level core tasks were added; two of these, Perform Impedance Plane Analysis and Interpret Impedance Plane Analysis, will require Third Party Certification. The items are identified by a bold border around the asterisk. Three 7-level core tasks were added to the CFETP.

**6.2. Initial Skills.** The decision was made to delete CAMS training. The time saved will be allocated to expanding time spent on Unshielded Radiography. Part of the time will be used to have the class set up a simulated unshielded barrier in the hangar. These changes will result in only minor changes to the apprentice course.

**6.3. Supplemental Courses.** Concurred with recommendation to delete DoD JOAP supplemental course and the 4<sup>th</sup> stage ECI inspection.

**6.4. Five Level CDCs.** All four volumes were revised.

**6.5. Seven-Level Upgrade Requirements.** All 3c STS line items were reduced to the 2b proficiency level. Training on technique development was deleted; time saved will be distributed to other areas of the course. Course length remains the same.

**6.6. Continuation Training.** Any additional knowledge and skill requirements that were not taught through initial or upgrade training are assigned to unit training or Training Detachments. The purpose of the continuation training program is to provide additional training exceeding minimum upgrade training requirements with emphasis on present and future duty position. MAJCOMs develop a proficiency training program that ensures individuals in the Nondestructive Inspection career field receive the necessary training at the appropriate point in their career. The program identifies both mandatory and optional training requirements.

**7. Community College of the Air Force (CCAF).** CCAF offers and awards job-related associate in applied science degrees and other academic credentials that enhance mission readiness, contribute to recruiting, assist in retention and support the career transitions of Air Force enlisted members. The college works with Air Force training centers, regional accrediting agencies, and hundreds of cooperating civilian colleges and universities. Since the technical nature of most Air Force courses places them on a level with college study, Airmen earn fully recognized college credits for most of what they learn in formal coursework and on-the-job training. Enrollment in CCAF occurs upon completion of basic military training. CCAF provides the opportunity to obtain a Nondestructive Testing Technology Associates Degree in Applied Science. In addition to its associate degree program, CCAF offers the following:

**7.1. Federal Aviation Administration (FAA) Airframe and Powerplant (A&P) Certification.** Air Force aircraft maintenance technicians are eligible to pursue FAA A&P

certification based on training and experience in accordance with Federal Aviation Regulation Part 65. The DoD established the Joint Service Aviation Maintenance Technician Certification Council (JSAMTCC) to standardize the eligibility and certification process for the military and provide direction and resources necessary to fill the gaps within military training and experience. Completing the Air Force A&P Certification Program, managed by CCAF, will fill training and experience gaps, ensuring FAA eligibility. The program consists of three Air University Online A&P Specialized Courses, OJT and experience requirements contained in a Qualification Training Package (QTP). Technicians may enroll in the program once they have been awarded the 5-skill level. To learn more, visit CCAF at <http://www.au.af.mil/au/ccaf/certifications.asp>. CCAF awards 30 semester hours for FAA A&P certification and 18 semester hours for FAA Airframe or Powerplant certification.

**7.2. SpaceTEC Aerospace Technician Certification.** Air Force aircraft maintenance technicians are eligible to pursue SpaceTEC Aerospace Technician certification based on aviation training and experience. SpaceTEC certification is endorsed by NASA and the Aerospace industry. Air University Online offers a Specialized Course to assist technicians prepare for the Aerospace Technician certification exams. To learn more, visit SpaceTEC at <http://www.spacetec.org/> or CCAF at <http://www.au.af.mil/au/ccaf/certifications.asp>. CCAF awards 25 semester hours for the SpaceTEC Aerospace Technician certification.

**7.3. CCAF Instructor Certification (CIC) Program.** CCAF offers the three-tiered CIC Program for qualified instructors teaching at CCAF affiliated schools who have demonstrated a high level of professional accomplishment. The purpose of the certifications is to recognize the outstanding instructor training provided to prepare them to teach CCAF collegiate courses. The certifications also formally acknowledge the instructor's advanced levels of qualifications and experience. Upon completion of the CCAF Faculty Development Program, consisting of the Basic Instructor Course (BIC) and CCAF Teaching Internship, CCAF instructors who complete program requirements may be nominated for certification by their school commander or commandant. The CIC Program replaced the CCAF Occupational Instructor Certification Program.

**7.4. CCAF Instructional Systems Development (ISD) Certification Program.** CCAF offers the ISD Certification Program for qualified course/curriculum developers and managers who are formally assigned at CCAF affiliated schools to develop and manage CCAF collegiate courses. The purpose of the certification is to recognize the course/curriculum developer's or manager's extensive training, education, qualifications and experience required to develop and manage CCAF courses. Course/curriculum developers and managers who complete program requirements may be nominated for certification by their school commander, commandant or faculty development chief.

**7.5. CCAF Professional Manager Certification (PMC).** CCAF offers the PMC Program for Air Force SNCO's. The purpose of the certification is to formally recognize the individual's outstanding education and training required to lead and manage Air Force personnel and critical national defense assets. It also acknowledges the individuals management qualifications and experience in managing Air Force resources. Qualified Air Force enlisted personnel are eligible

to pursue this certification. SNCO's who complete program requirements may be nominated for certification by their unit commander or commandant.

**7.6. CCAF Credentialing and Education Research Tool (CERT).** CCAF implemented CERT to increase awareness of professional development opportunities applicable to Air Force occupational specialties. It is a valuable resource for Air Force enlisted personnel and provides information related to specific AFSCs, such as: AFSC description; civilian occupation equivalencies (US Department of Labor); CCAF degree programs; national professional certifications; certifying agencies; DANTES testing; and professional organizations. To learn more, visit CCAF at <http://www.au.af.mil/au/ccaf/certifications.asp>.

**7.7. CCAF Degree Requirements.** All airmen are automatically entered into the CCAF program. Prior to completing an associate degree, the 5-level must be awarded and the following requirements must be met:

	<u>Semester Hours</u>
Technical Education.....	24
Leadership, Management, and Military Studies .....	6
Physical Education.....	4
General Education.....	15
Program Elective.....	<u>15</u>
(Technical Education; Leadership, Management, and Military Studies; or General Education)	
Total	64

**7.7.1. Technical Education** (24 Semester Hours): A minimum of 12 semester hours of Technical Core subjects and courses must be applied and the remaining semester hours applied from Technical Core or Technical Elective subjects and courses. Completion of the initial skills resident training at Naval Air Station, Pensacola, FL satisfies all or part of the technical education requirement.

**7.7.2. Leadership, Management, and Military Studies** (6 Semester Hours): Professional Military Education (PME) and/or civilian management courses.

**7.7.3. Physical Education** (4 Semester Hours): This requirement is satisfied by completion of Basic Military Training.

**7.7.4. General Education** (15 Semester Hours): Applicable courses must meet the criteria for application of courses to the General Education Requirements (GER) and be in agreement with the definitions of applicable General Education subjects/courses as provided in the *CCAF General Catalog*.

**7.7.5. Program Elective** (15 Semester Hours): Satisfied using credit otherwise not used toward degree requirements; however, applicable as Technical Education; Leadership, Management, and Military Studies (LMMS) or General Education subjects and courses. Nine semester hours of

CCAF degree-applicable technical credit otherwise not applicable to this program may be applied. See the *CCAF General Catalog* for details regarding the Associates of Applied Science for this specialty.

**7.8. Air Education and Training Command (AETC) Instructor Requirements:** Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an AETC instructor should be actively pursuing an associate degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

## 8. Career Field Path

**8.1. Enlisted Career Path.** Table 8.1 identifies career milestones for the 2A7X2 AFSC.

<b>Table 8.1 Enlisted Career Path</b>				
<b>Education and Training Requirements</b>	<b>Grade Requirements</b>			
	<b>Rank</b>	<b>Average Sew-On</b>	<b>Earliest Sew-On</b>	<b>High Year Of Tenure</b>
<b>Basic Military Training School</b>				
<b>Apprentice Technical School (3-Skill Level)</b>	Amn A1C	6 months 16 months		
<b>Upgrade To Journeyman (5-Skill Level)</b> - Minimum 12 months OJT - Minimum 9 months OJT for retrainees - Complete all 5-level core tasks - Complete appropriate CDC if/when available	Amn A1C SrA	6 months 16 months 3 years	28 months	10 years
<b>Airman Leadership School (ALS)</b> - Must be a SrA with 48 months time in service or be a SSgt Selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).	<u>Trainer</u> -Trained and qualified to perform the task to be trained -Must attend the Air Force Training Course (AFTC) <u>Certifier</u> -Minimum rank of SSgt with a 5-skill level, or civilian equivalent, capable of evaluating the task being certified, and have completed the AFTC.			
<b>Upgrade To Craftsman (7-Skill Level)</b> - Minimum rank of SSgt - Minimum 12 Months OJT - Minimum 6 Months OJT for retrainees - Complete all 5- and 7-level core tasks - Complete appropriate CDC if/when available	SSgt	4.9 years	3 years	20 years
<b>Noncommissioned Officer Academy (NCOA)</b> - Must be a TSgt, MSgt Selectee, or MSgt - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only)	TSgt MSgt	10.3 years 16.4 years	5 years 8 years	22 years 24 years
<b>Upgrade to Superintendent (9-Skill Level)</b> - Minimum rank of SMSgt  <b>USAF Senior NCO Academy (SNCOA)</b> - Must be a MSgt, SMSgt, or SMSgt Selectee - Resident graduation is a prerequisite for SMSgt sew-on (Active Duty Only)	SMSgt	20.4 years	11 years	26 years
<b>Chief Enlisted Manger (CEM)</b>	CMSgt	23.9 years	14 years	30 years



**8.2. Base/Unit Education and Training Manager Checklist:**

<b>Table 8.2. Base/Unit Education and Training Manager Checklist</b>		
<b>Requirements for Upgrade to:</b>	<b>Y</b>	<b>N</b>
<b>Journeyman</b> - Has the apprentice completed mandatory CDCs, if available? - Has the apprentice completed all appropriate 5-level core tasks identified in the CFETP? - Has the apprentice completed all other duty position tasks identified by the supervisor? - Has the apprentice completed 12 months upgrade training (9 months for retrainees) for award of the 5-skill level? - Has the apprentice met mandatory requirements listed in specialty description Air Force Enlisted Classification Directory (AFECD), and the CFETP? - Has the apprentice been recommended by their supervisor?		
<b>Craftsman</b> - Has the journeyman achieved the rank of SSgt? - Has the journeyman completed mandatory CDCs? - Has the journeyman completed all core tasks identified in the CFETP? - Has the journeyman completed all other duty position tasks identified by the supervisor? - Has the journeyman completed a minimum 12 months UGT for award of the 7-skill level?		

**Section C - Skill Level Training Requirements**

**9. Purpose.** Skill level training requirements in the 2A7X2 career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific tasks and knowledge training requirements are identified in Part II, Section E, Specialty Training Standard (STS).

**10. Specialty Qualification Requirements.** The various skill levels in this career field are defined in terms of tasks and knowledge proficiency requirements for each skill level. They are stated in broad general terms and establish the standards of performance. Unit work centers must develop a structured training program to ensure the following requirements are met.

**10.1. Apprentice Level Training:**

**10.1.1. Specialty Qualification.** This information is located in the official specialty description in Air Force Enlisted Classification Directory (AFECD), paragraph 3.

**10.1.1.1. Knowledge.** To perform duties at the 3-skill level, an individual must possess basic knowledge of the following: characteristics of metal identification; wear metals identification and content; metal discontinuity and flaw detection; operation and maintenance of nondestructive test and oil analysis equipment; safety codes and practices; radiological safety and radiation monitoring procedures; technical orders and directives; and proper handling, use, and disposal of hazardous waste and materials.

**10.1.1.2. Education.** For entry into this specialty, completion of high school with courses in mathematics, chemistry, industrial technology, physics, and shop is desirable. Also, completion of computer knowledge courses is desirable.

**10.1.1.3. Training.** For award of AFSC 2A732, completion of the Nondestructive Inspection Apprentice course is mandatory.

**10.1.1.4. Experience.** None.

**10.1.2. Training Sources and Resources.** The initial skills course will provide the required knowledge, qualification, and, if applicable, certification.

**10.1.3. Implementation.** Upon graduation from Basic Military Training (BMT), completion of the Nondestructive Inspection Apprentice course is mandatory. This course satisfies the knowledge and training resource requirements for award of the 3-skill level.

## **10.2. Journeyman Level Training:**

**10.2.1. Specialty Qualification.** This information is located in the official specialty description in Air Force Enlisted Classification Directory (AFECD), paragraph 3.

**10.2.1.1. Knowledge.** In addition to the 3-level qualifications, a 5-skill level must be able to understand and apply knowledge of the following: characteristics of metals identification; wear metals identification and content; metal discontinuity and flaw detection; operation and maintenance of nondestructive test and oil analysis equipment; safety codes and practices; radiological safety and radiation monitoring procedures; technical orders and directives; and proper handling, use, and disposal of hazardous waste and materials.

**10.2.1.2. Education.** There are no additional education requirements beyond those defined for the apprentice level. However, completion of a CCAF degree is desirable.

**10.2.1.3. Training.** For award of AFSC 2A752, the 5-level CDC provides the career knowledge training required. Qualification training and OJT will provide training and qualification on the core tasks identified in the STS. The CDC is written to build from the trainee's current knowledge base, and provides more in-depth knowledge to support OJT requirements.

**10.2.1.4. Experience.** Qualification in and possession of AFSC 2A732. Also, experience in flaw detection process controls, equipment calibration and maintenance, safety directives, and hazardous waste programs. Completion of all 5-level core tasks identified in the STS is mandatory.

**10.2.2. Training Sources and Resources.** A minimum of 12 months (9 months for retrainees) on-the-job training, completion of the 2A752 CDC, and completion of the 5-level core tasks represent the resources needed for award of the 5-skill level.

**10.2.3. Implementation.** Training to the 5-level is performed by the units utilizing this STS, exportable courses, and CDCs. Upgrade to the 5-level requires completion of CDC 2A752, completion of all core tasks, and 12 months upgrade training.

### **10.3. Craftsman Level Training:**

**10.3.1. Specialty Qualification.** This information is located in the official specialty description in Air Force Enlisted Classification Directory (AFECD), paragraph 3.

**10.3.1.1. Knowledge.** A 7-level must possess advanced skills and knowledge of the following: characteristics of metals identification; wear metals identification and content; metal discontinuity and flaw detection; operation and maintenance of nondestructive test and oil analysis equipment; safety codes and practices; radiological safety and radiation monitoring procedures; technical orders and directives; and proper handling, use, and disposal of hazardous waste and materials.

**10.3.1.2. Education.** There are no additional education requirements beyond those defined for the apprentice level. However, completion of a CCAF degree is desirable.

**10.3.1.3. Training.** Completion of the mandatory 2AX7X CDC and 7-level core tasks is mandatory for upgrade to 2A772.

**10.3.1.4. Experience.** Qualification in and possession of AFSC 2A752. Completion of all 5- and 7-level core tasks identified in the STS is mandatory.

**10.3.2. Training Sources and Resources.** A minimum of 12 months (6 months for retrainees) on-the-job training, completion of CDC 2AX7X, along with supervisor certification of Air Force directed core tasks, represent the resources required for award of the 7-skill level.

**10.3.3. Implementation.** Upgrade to the 7-level will require completion of all AF core tasks, 12 months OJT and 7-level 2AX7X CDC.

### **10.4. Superintendent Level Training:**

**10.4.1. Specialty Qualification.** This information is located in the official specialty description in Air Force Enlisted Classification Directory (AFECD), paragraph 3.

**10.4.1.1. Knowledge.** Knowledge is mandatory of the following: aircraft structural maintenance, low observable aircraft structural maintenance, metals technology, and nondestructive inspection methods; characteristics and directives; maintenance data reporting; and proper handling, storage, use, and disposal of hazardous waste and materials.

**10.4.1.2. Education.** There are no additional education requirements beyond those defined for the apprentice level. However, completion of a CCAF degree is desirable.

**10.4.1.3. Training.** For award of AFSC 2A790, promotion to SMSgt is mandatory.

**10.4.1.4. Experience.** For award of AFSC 2A790, qualification in and possession of AFSC 2A771, 2A772, 2A773, or 2A775 is mandatory. Also, experience is mandatory managing aircraft structural maintenance, low observable aircraft structural maintenance, aircraft metals technology, corrosion control or nondestructive inspection specialties and functions.

**10.4.2. Training Sources and Resources.** None.

**10.4.3. Implementation.** The 9-level will be awarded after promotion to SMSgt.

***Section D - Resource Constraints***

**11. Purpose.** This section identifies known resource constraints that preclude optimal/desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility, and target completion dates. Resource constraints will be, as a minimum, reviewed and updated annually.

**12. Apprentice Level Training:** No apprentice-level resource constraints were identified by the U&TW.

**13. Five-Level Training:** No 5-level resource constraints were identified by the U&TW.

**14. Seven-Level Training:** No 7-level resource constraints were identified by the U&TW.

***Section E - Transitional Training Guide.*** There are no transition training requirements. This area is reserved.

## PART II

### *Section A - Course Objective List*

**1. Measurement.** Each proficiency coded STS task or knowledge item taught at the technical school is measured through the use of an objective. An objective is a written instruction for students so they know what is expected of them to successfully complete training on each task. Each objective is comprised of a condition, behavior, and standard that states what is expected of the student for each task. The condition is the setting in which the training takes place. The behavior is the action a student must demonstrate to accomplish a task (i.e. remove and install wheel and tire assembly). The standard is the level of performance that is measured to ensure the STS proficiency code level is attained. Each objective uses letter code(s) to identify how it is measured. All objectives use the **PC** code that indicates a progress check is used to measure subject or task knowledge. Progress checks are also used to measure student accomplishment of performance objectives. **W** indicates a comprehensive written test and is used to measure the subject and/or task knowledge at the end of a block of instruction. **PC/W** indicates separate measurement of both knowledge and performance elements using a written test and a performance progress check.

**2. Standard.** The minimum standard is 70% on written examinations. Standards for performance measurement are indicated in the objective and delineated on the individual's progress checklist. The checklist is used by the instructor to document each student's progress on each task. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained. Students must satisfactorily complete all PCs prior to taking the written test.

**3. Proficiency Level.** Most task performance is taught to the "2b" or "3c" proficiency level. The "2b" means the student **can do most parts of the task**, but does need assistance on the hardest parts of the task (**partially proficient**). The student can also determine step-by-step procedures for doing the task. The "3c" means the student **can do all parts of the task** but may need a spot check of completed work (**competent**). The student should be able to identify why and when the task must be done and why each step is needed.

**4. Course Objectives.** If you require detailed course descriptions and objectives, please provide a written request to the AETC Training Manager, 361 TRS/TRR, 501 Missile Road, Sheppard AFB TX 76311-2264.

### *Section B - Support Material*

**5.** The following list of support material is not all inclusive; however, it covers the most frequently referenced areas. Support material is any training package designed to enhance the learning process at any level of training. Refer to the Air Force Education and Training Course Announcements (ETCA) for information on AETC formal courses. ETCA can be accessed at <https://etca.randolph.af.mil/>.

**5.1.** Interactive Courseware (ICW) courses are available from (or under development by) 367 TRS/TRSS, Hill AFB, Utah. Their course catalog is available on the Internet at <https://367catalog.hill.af.mil/367TRSSHome/index.html>. Questions should be referred to the customer service number at DSN 777-0160.

**5.2.** The Air Force NDI Office is the central point of contact for the NDI community. This information can be found at <https://wwwmil.tinker.af.mil/ndi>

### ***Section C - Training Course Index***

**6. Purpose.** This section of the CFETP identifies Air Force resident, Air Force Institute for Advanced Distributed Learning (ADLS), and exportable courses used to support training for the 2A7X2 Nondestructive Inspection specialty. Refer to the Air Force Education and Training Course Announcements (ETCA) at <https://etca.randolph.af.mil> for information on AETC formal courses listed below. For further information on the following courses, contact the OPR at:

361 TRS/TRR  
501 Missile Road  
Sheppard AFB, TX 76311-2264  
DSN 736-7492

### **7. Air Force In-Resident Courses:**

<b>COURSE NUMBER</b>	<b>COURSE TITLE</b>	<b>OPR</b>
JCABP2A732 048B	Nondestructive Inspection Apprentice	361 TRS/Det 2
JCAZP2A752 0U1A	Ultrasonic Inspection and Impedance Plane Analysis	361 TRS/Det 2

### **8. Air Force Advanced Distributed Learning Service (ADLS) Courses:**

<b>COURSE NUMBER</b>	<b>COURSE TITLE</b>	<b>OPR</b>
CDC 2A752	Nondestructive Inspection Journeyman	361 TRS/Det 2
CDC 2AX7X	Aerospace Maintenance Craftsman	HQ USAF/A4LF

### **9. Exportable Courses.**

<b>COURSE NUMBER</b>	<b>COURSE TITLE</b>	<b>OPR</b>
J6AZWXXXXX 0G1A	AF Technical Order System (General)	362 TRS
J6AZWXXXXX 0A1A	AF Technical Order System (Advanced)	362 TRS
J6AZW2AX5X 0B1A	Integrated Maintenance Data System (IMDS) for Backshop	362 TRS
J6AZW2AX5X 0S1A	Integrated Maintenance Data System (IMDS) for Supervisors	362 TRS

For further information contact the OPR at:

362 TRS  
613 10<sup>th</sup> Ave  
Sheppard AFB, TX 76311-2352  
DSN 736-5206/6184  
<https://etca.randolph.af.mil/>

Interactive Courseware (ICW) courses are available from or are under development by 367 TRS/TRSS at Hill AFB, Utah and 982 MXS/TSU at Sheppard AFB, Texas.

For further information contact the OPRs at:

367 TRSS	982 MXS/TSU
6058 Aspen Ave	912 I Ave Ste 4
Hill AFB, UT 84056-5805	Sheppard AFB, TX 76311-2334
DSN 777-7830/8741	DSN 736-3001
<a href="http://www.hill.af.mil/367trss/">http://www.hill.af.mil/367trss/</a>	<a href="https://webm.sheppard.af.mil/982trg/default.asp?header=982MX&amp;bodypage=HOME">https://webm.sheppard.af.mil/982trg/default.asp?header=982MX&amp;bodypage=HOME</a>

#### ***Section D- MAJCOM Unique Requirements.***

**10.** For MAJCOM-unique requirements, refer to the following web sites:

Combat Air Force (CAF): <https://afkm.wpafb.af.mil/ASPs/CoP/OpenCoP.asp?Filter=OO-TE-AC-42>

Mobility Air Force (MAF):

<https://afkm.wpafb.af.mil/ASPs/docman/DOCMain.asp?Tab=0&FolderID=OO-ED-AM-91-2&Filter=OO-ED-AM-91>

Air Education and Training Command (AETC)/A4M CoP:

<https://www.dmy.af.mil/afknprod/ASPs/CoP/EntryCoP.asp?Filter=AE-ED-03-50>

#### ***Section E - Specialty Training Standard***

**11. Implementation.** This STS will be used for technical training provided by Air Education and Training Command for the apprentice class beginning 12 Oct 2010 and graduating 21 Dec 2010.

**12. Purpose.** As prescribed in AFI 36-2201, this STS:

**12.1.** Lists in column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for Airmen to perform duties in the 3-, 5-, and 7-skill level.

**12.2.** Identifies in column 2 (Core Tasks) by asterisk (\*), specialty-wide training requirements. Core tasks identified with an \*R are optional for the AFRC and the ANG. MAJCOM Functional

Managers, commanders, and supervisors may designate additional critical tasks as necessary. When designated, certify these core tasks using normal core task certification procedures.

**AFCFM has identified two tasks that require third-party certification.** These tasks are identified with a bold border around the core task asterisk. Exemptions:

**12.2.1.** Core tasks which are not applicable to base assigned aircraft or equipment are not required for upgrade (units are not required to send personnel TDY for core task training). Note: Five-levels can be certified on 7-level core tasks at any point of the career ladder.

**12.2.2.** For units with more than one mission design (e.g. A-10, C-130) aircraft, upgrade trainees need only complete core tasks on a single mission design. MFMs, unit commanders, and/or supervisors may require trainees to complete core task training on additional mission design aircraft, if desired. If some of these core tasks involve training in another unit on base, trainees must still complete all core tasks relevant to at least one mission design aircraft. Flightline-assigned personnel must complete backshop core tasks and vice versa. All units are bound by the requirements in this CFETP and will accommodate core task trainees from other units.

**12.2.3.** Units that use the GO81 maintenance data collection system do not need to complete IMDS Computer Based Training (CBT) core tasks. However, these units must be capable of training IMDS related CBT core tasks for deployment preparation. This capability ensures GO81 users are capable of operating IMDS prior to deploying to IMDS using units. This requirement will remain in effect until GO81 and IMDS are converted to the Enterprise MIS or Expeditionary Combat Support System (ECSS).

**12.3.** Provides certification for OJT. Column 3 is used to record completion of tasks and knowledge training requirements. Use IMDS to document technician qualifications, if available. Task certification must show a certification or completed date.

**12.4.** Shows formal training and correspondence course requirements. Column 4 shows the proficiency to be demonstrated on the job by the graduate as result of training on the task/knowledge and the career knowledge provided by the correspondence course.

**12.5.** Is a guide for development of promotion tests used in the Weighted Airman Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members as most appropriate for promotion to higher grades. Questions are based upon study references listed in the WAPS catalog. Individual responsibilities are outlined in AFI 36-2502, *Airman Promotion Program*. WAPS is not applicable to the Air National Guard or Air Force Reserve.

**13. Qualitative Requirements.** Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.



**14. Job Qualification Standard.** Becomes a job qualification standard (JQS) for on-the-job training when placed in AF Form 623, **Individual Training Record**, and used according to AFI 36-2201. For OJT, the tasks in column 1 are trained and qualified to the go/no go level. "Go" means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct procedures. When used as a JQS, the following requirements apply:

**14.1. Documentation.** Document and certify completion of training IAW AFI 36-2201. Automated records, utilizing MIS reflecting this STS is highly encouraged.

**14.2. Converting from Old Document to CFETP.** All AFJQSs and previous CFETPs are replaced by this CFETP; therefore, conversion of all training records to this CFETP STS is mandatory. Use this CFETP STS (or automated STS) to identify and certify all past and current qualifications. Document and certify all previous and current training IAW AFI 36-2201.

**15. Recommendations:** Report unsatisfactory performance of individual course graduates to the AETC training manager at 361 TRS/TRR, 501 Missile Road, Sheppard AFB TX, 76311-2264, DSN 736-7492. Reference specific STS paragraphs. A customer service information line (CSIL) has been installed for the supervisor's convenience to identify graduates who may have received over or under training on task/knowledge items listed in this training standard. For a quick response to problems, call our customer service information line, DSN 736-5236, any time, day or night.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

LOREN M. RENO, Lieutenant General, USAF  
DCS/Logistics, Installations and Mission Support

3 Attachments

1. Proficiency Code Key
2. Specialty Training Standard (STS)
3. 2AX7X CDC

# PROFICIENCY CODE KEY

CFETP 2A7X2, 1 October 2010

<i>This Block Is For Identification Purposes Only</i>		
Name Of Trainee		
Printed Name (Last, First, Middle Initial)	Initials (Written)	SSAN (last four)
Printed Name Of Training/Certifying Official And Written Initials		
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	

## QUALITATIVE REQUIREMENTS

Proficiency Code Key		
	Scale Value	Definition: The individual
Task Performance Levels	1	<b>IS EXTREMELY LIMITED</b> (Can do simple parts of the task. Needs to be told or shown how to do most of the task.)
	2	<b>IS PARTIALLY PROFICIENT</b> (Can do most parts of the task. Needs help only on hardest parts.)
	3	<b>IS COMPETENT</b> (Can do all parts of the task. Needs only a spot check of completed work.)
	4	<b>IS HIGHLY PROFICIENT</b> (Can do the complete task quickly and accurately. Can tell or show others how to do the task.)
*Task Knowledge Levels	a	<b>KNOWS NOMENCLATURE</b> (Can name parts, tools, and simple facts about the task.)
	b	<b>KNOWS PROCEDURES</b> (Can determine step by step procedures for doing the task.)
	c	<b>KNOWS OPERATING PRINCIPLES</b> (Can identify why and when the task must be done and why each step is needed.)
	d	<b>KNOWS ADVANCED THEORY</b> (Can predict, isolate, and resolve problems about the task.)
**Subject Knowledge Levels	A	<b>KNOWS FACTS</b> (Can identify basic facts and terms about the subject.)
	B	<b>KNOWS PRINCIPLES</b> (Can identify relationship of basic facts and state general principles about the subject.)
	C	<b>KNOWS ANALYSIS</b> (Can analyze facts and principles and draw conclusions about the subject.)
	D	<b>KNOWS EVALUATION</b> (Can evaluate conditions and make proper decisions about the subject.)


Explanations:

\* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)

\*\* A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.

- This mark is used alone instead of a scale value to show that no proficiency training is provided in the courses or CDCs.

/ This mark is used in course columns to show that training is required but not given due to limitations in resources (3c/b, 2b/b etc.).

 This mark is used to indicate third party certification requirements identified by the Career Field Manager.

# SPECIALTY TRAINING STANDARD

CFETP 2A7X2, 1 October 2010

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used to Indicate Training/Information Provided (See Atch 1)			
	A	B	A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
<b>ATTACHMENT 2</b> NOTE 1: Items in column 2A/2B marked with an asterisk (*) identify core tasks. Tasks identified by */R as core tasks are optional for ANG and AFRC when training capability is not available, but must be accomplished when capability becomes available. NOTE 2: All tasks and knowledge identified as training requirements in column 4A will be taught during wartime. NOTE 3: Users are responsible for annotating training references to identify current references pending STS revision. NOTE 4: Address comments and recommended changes through the MAJCOM Functional Managers to the AETC Training Manager, DSN 736-7492.											
A2.1. CAREER LADDER PROGRESSION TR: Air Force Enlisted Classification Directory (AFECD)											
A2.1.1. Progression in Career Ladder 2A7X2								A	-	-	-
A2.1.2. Duties of 2A732/2A752								A	-	-	-
A2.2. OPERATIONS SECURITY VULNERABILITIES OF AFSC 2A7X2 TR: AFI 10-1101								A	-	-	-
A2.3. AIR FORCE OCCUPATIONAL SAFETY AND HEALTH TR: AFI 91-302; Applicable AFOSH Standards;											
A2.3.1. Hazards of AFSC 2A7X2								A	B	-	-
A2.3.2. AFOSH Standard for AFSC 2A7X2								-	B	-	-
A2.4. HAZARDOUS MATERIALS AND WASTE HANDLING ACCORDING TO ENVIRONMENTAL STANDARDS TR: AFOSH Std 161-21.1W											
A2.4.1. Types of Hazardous Materials/fluids								B	-	-	-
A2.4.2. Handling Procedures								B	-	-	-
A2.4.3. Storage and Labeling								B	-	-	-
A2.4.4. Proper Disposal								B	-	-	-
A2.5. TECHNICAL PUBLICATIONS TR: AFPD 21-3; TO 00-5-1, Applicable -36 TOs; 33B-series TOs											
A2.5.1. Technical Order Familiarization								-	B	-	-
A2.5.2. Use Technical Orders to Perform Nondestructive Inspections	*							2b	b	-	-
A2.5.3. Maintain Technical Order Files								-	b	-	-
A2.6. SUPPLY MANAGEMENT  TR: AFMAN 23-110 ; Allowance Standards 002, 285, 455, 460; Fed Log; AFCSM 21-563											
A2.6.1.1. Special requisitions								-	A	-	-
A2.6.1.2. Issue slips								-	A	-	-
A2.6.1.3. Turn-in slips								-	A	-	-

# SPECIALTY TRAINING STANDARD

CFETP 2A7X2, 1 October 2010

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used to Indicate Training/Information Provided (See Atch 1)			
	A	B	A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.6.2. Equipment Authorizations								-	A	-	-
A2.6.3. Maintain Supply Documentation								-	-	-	-
A2.6.4. Use IMDS/GO81 Supply Interface (SBSS)								-	-	-	-
A2.6.5. Manage Resources											
A2.6.5.1. Maintain equipment accountability								-	-	-	-
A2.6.5.2. Supplies											
A2.6.5.2.1. Issue								-	-	-	-
A2.6.5.2.2. Establish levels								-	-	-	-
A2.6.5.2.3. Maintain levels								-	-	-	-
A2.7. SUPERVISION AND TRAINING TR: Air Force Enlisted Classification Directory (AFECD); AFI 21-101											
A2.7.1. Supervise Personnel											
A2.7.1.1. Determine personnel requirements								-	-	-	-
A2.7.1.2. Orient new personnel								-	-	-	-
A2.7.1.3. Interpret/implement policies, directives or procedures for subordinates								-	-	-	-
A2.7.2. Train Personnel											
A2.7.2.1. Determine training requirements								-	-	-	-
A2.7.2.2. Assign OJT trainers or supervisors								-	-	-	-
A2.7.2.3. Maintain records								-	-	-	-
A2.7.2.4. OJT trainer requirements											
A2.7.2.4.1. Prepare teaching outlines or task breakdowns								-	-	-	-
A2.7.2.4.2. Provide trainees theory and train on actual equipment								-	-	-	-
A2.7.2.4.3. Provide feedback on training provided								-	-	-	-
A2.7.2.5. OJT task certifier requirements											
A2.7.2.5.1. Develop methods of evaluation to determine trainee knowledge/qualification and training effectiveness								-	-	-	-
A2.7.2.5.2. Use appropriate method of evaluation and effectively determine trainee's ability								-	-	-	-
A2.7.2.5.3. Provide supervisor and trainer feedback on results of training provided, and trainee's strengths and/or weaknesses								-	-	-	-
A2.7.3. Plan/Schedule Maintenance and Repair Work											

# SPECIALTY TRAINING STANDARD

CFETP 2A7X2, 1 October 2010

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used to Indicate Training/Information Provided (See Atch 1)			
	A	B	A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.7.3.1. Analyze workload requirements								-	-	-	-
A2.7.3.2. Coordinate with other agencies								-	-	-	-
A2.7.3.3. Determine/Establish priorities								-	-	-	-
A2.7.3.4. Adjust daily maintenance plans to meet operational commitments								-	-	-	-
A2.8. MAINTENANCE AND INSPECTION TR: AFI 21-101; AFI 21-202; TO 00-20 series; TO 00-35D-54											
A2.8.1. Maintenance Levels								A	B	-	-
A2.8.2. Inspection Systems								A	B	-	-
A2.8.3. Scheduled/Special Inspection Requirements TR: -6 series TOs								-	B	-	-
A2.8.4. Quality Deficiency Reporting System								-	B	-	-
A2.8.5. Maintenance Information Systems (MIS)											
A2.8.5.1. Integrated Maintenance Data Systems (IMDS)								-	B	-	-
A2.8.5.2. GO81								-	B	-	-
A2.8.6. Use IMDS TR: AFCSM 21 series; TO 00-20 series											
A2.8.6.1. Open/Create discrepancies	*							-	-	-	-
A2.8.6.2. Close discrepancies	*							-	-	-	-
A2.8.6.3. Access applicable IMDS menus and data screens								-	-	-	-
A2.8.6.4. Complete course J6AZW2AX5X 0B1A, IMDS for Backshop	*							-	-	-	-
A2.8.6.5. Complete Course J6AZW2AX5X 0S1A, IMDS for Supervisors		*/R						-	-	-	-
A2.8.7. Use GO 81 TR: 80-81/SBSS Systems Interface Users Guide, TO 00-20 series											
A2.8.7.1. Open/Create discrepancies	*							-	-	-	-
A2.8.7.2. Close discrepancies	*							-	-	-	-
A2.8.8. Use Process Control Automated Maintenance System (PCAMS) TR: TO 33B-1-1								-	-	-	-
A2.8.9. Composite Tool Kit (CTK) Management TR: AFI 21-101 and applicable supplements											

# SPECIALTY TRAINING STANDARD

CFETP 2A7X2, 1 October 2010

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used to Indicate Training/Information Provided (See Atch 1)			
	A	B	A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.8.9.1. Use/maintain hand tools								-	-	-	-
A2.8.9.2. CTK procedures and documentation								-	-	-	-
A2.8.9.3. Use of Tool Accountability System (TAS) TR: AFI 21-101								-	-	-	-
A2.8.10. Probability of Detection (POD)											
A2.8.10.1 POD Fundamentals								-	A	-	-
A2.9. AEROSPACE CONSTRUCTION FEATURES TR: Applicable -3 and -36 TOs											
A2.9.1. Major Components								A	B	-	-
A2.9.2. Reference Line Definitions								A	B	-	-
A2.9.3. Aircraft Markings								A	B	-	-
A2.10. BASIC METALLURGY TR: TOs 1-1A-1, 1-1A-9, 33B-1-1											
A2.10.1. Properties of Metal											
A2.10.1.1. Physical								A	B	-	-
A2.10.1.2. Mechanical								A	B	-	-
A2.10.2. Classification of Metals								A	B	-	-
A2.10.3. Types of Discontinuities											
A2.10.3.1. Manufacturing								A	B	-	-
A2.10.3.2. Service								A	B	-	-
A2.11. OPTICAL EVALUATION TR: Equipment manuals; Applicable TOs for aircraft assigned											
A2.11.1. Use Optical Equipment	*							2b	b	-	-
A2.11.2. Operator Maintenance								A	B	-	-
A2.12. LIQUID PENETRANT INSPECTION METHOD TR: Equipment Manuals; Mil Standards; TO 33B-1-1; 33B-1-2; -9 Series TO , -36 Series TO; Applicable equipment TOs											
A2.12.1. Fundamentals of Liquid Penetrant Inspection											
A2.12.1.1. Method A								B	B	-	-
A2.12.1.2. Method B								B	B	-	-
A2.12.1.3. Method C								B	B	-	-
A2.12.1.4. Method D								B	B	-	-
A2.12.2. Inspect Parts Using											

# SPECIALTY TRAINING STANDARD

CFETP 2A7X2, 1 October 2010

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used to Indicate Training/Information Provided (See Atch 1)			
	A	B	A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.12.2.1. Method A								-	-	-	-
A2.12.2.2. Method B								-	-	-	-
A2.12.2.3. Method C	*							2b	b	-	-
A2.12.2.4. Method D	*							2b	b	-	-
A2.12.3. Interpret indications	*							2b	a	-	-
A2.12.4. Perform Process Control	*							2b	b	-	-
A2.12.5. Operator maintenance								A	B	-	-
A2.13. MAGNETIC PARTICLE INSPECTION METHOD TR: Equipment Manuals; Mil Standards; TO 33B-1-1; 33B-1-2; -9 Series TO, -36 Series TO; Applicable equipment TOs											
A2.13.1. Fundamentals of Magnetic Particle Inspection								B	B	-	-
A2.13.2. Inspect Parts											
A2.13.2.1. Using circular magnetism	*							2b	b	-	-
A2.13.2.2. Using longitudinal magnetism	*							2b	b	-	-
A2.13.2.3. Demagnetize part	*							2b	b	-	-
A2.13.3. Interpret indications	*							2b	a	-	-
A2.13.4. Perform Process Control	*							2b	b	-	-
A2.13.5. Operator maintenance								A	B	-	-
A2.14. EDDY CURRENT INSPECTION METHOD TR: Equipment Manuals; Mil Standards; TO 33B-1-1; 33B-1-2; -9 Series TO, -36 Series TO; Applicable equipment TOs											
A2.14.1. Fundamentals of eddy current inspection								B	B	-	-
A2.14.2. Use standards	*							2b	b	-	-
A2.14.3. Principles of Impedance Plane Analysis								B	B	-	-
A2.14.4. Inspect parts using											
A2.14.4.1 Rotary Fastener Hole	*							2b	a	-	-
A2.14.4.2. Impedance testing								2b	a	-	-
A2.14.4.3. Conductivity testing	*							2b	a	-	-
A2.14.4.4. Impedance Plane Analysis	*							2b	a	-	-
A2.14.5. Interpret indications using											
A2.14.5.1. Rotary Fastener Hole								2b	b	-	-

# SPECIALTY TRAINING STANDARD

CFETP 2A7X2, 1 October 2010

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used to Indicate Training/Information Provided (See Atch 1)			
	A	B	A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.14.5.2. Impedance testing								2b	b	-	-
A2.14.5.3. Impedance Plane Analysis	*							2b	b	-	-
A2.14.6. Operator Maintenance								A	B	-	-
A2.15. ULTRASONIC INSPECTION METHOD TR: Equipment Manuals; Mil Standards; TO 33B-1-1; 33B-1-2; -9 Series TO, -36 Series TO; Applicable equipment TOs											
A2.15.1. Fundamentals of Ultrasonics								B	B	-	-
A2.15.2. Use Standards	*							2b	b	-	-
A2.15.3. Inspect Parts Using:											
A2.15.3.1. Longitudinal wave	*							2b	b	-	-
A2.15.3.2. Shear wave	*							2b	b	-	-
A2.15.3.3. Surface wave								-	a	-	-
A2.15.4. Interpret Indications	*							2b	a	-	-
A2.15.5. Operator Maintenance								A	B	-	-
A2.15.6. Perform Process Control	*							2b	b	-	-
A2.16. BOND TESTING METHOD TR: Equipment manuals; Equipment TOs; TO 33B-1-1; -36 Series TO; Applicable equipment TOs											
A2.16.1. Fundamentals of Bond Testing								B	B	-	-
A2.16.2. Use Standards	*							2b	b	-	-
A2.16.3. Inspect Parts Using:											
A2.16.3.1. Tap test								-	b	-	-
A2.16.3.2. Ultrasonics	*							2b	b	-	-
A2.16.3.3. Mechanical Impedance Analysis (MIA)								2b	b	-	-
A2.16.3.4. Resonance								2b	b	-	-
A2.16.3.5. Pitch-Catch								2b	b	-	-
A2.16.4. Interpret Indications	*							2b	a	-	-
A2.16.5. Operator Maintenance								A	B	-	-
A2.17. COMPOSITE COMPONENT INSPECTION METHOD TR: Mil Stds; TO 33B-1-1; -36 Series TO; Applicable equipment TOs											
A2.17.1. Fundamentals of Composite Structures								B	B	-	-
A2.17.2. Use Standards	*							2b	b	-	-
A2.17.3. Inspect Parts Using:											



# SPECIALTY TRAINING STANDARD

CFETP 2A7X2, 1 October 2010

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used to Indicate Training/Information Provided (See Atch 1)			
	A	B	A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.17.3.1. Pulse echo	*							2b	b	-	-
A2.17.3.2. Through transmission	*							2b	b	-	-
A2.17.4. Interpret Indications	*							2b	a	-	-
A2.18. RADIOGRAPHIC INSPECTION METHOD TR: Applicable AFIs; TO 33B-1-1; 33B-1-2; -36 TOs; Applicable equipment TOs											
A2.18.1. Fundamentals of Radiography								B	B	-	-
A2.18.2. Radiation Safety											
A2.18.2.1. Shielded operation											
A2.18.2.1.1. Personnel exposure levels								B	B	-	-
A2.18.2.1.2. Use radiation detection devices	*							2c	b	-	-
A2.18.2.1.3. Protection requirements								B	B	-	-
A2.18.2.1.4. Use radiation hazard markings/warning devices	*							2c	b	-	-
A2.18.2.2. Unshielded operations											
A2.18.2.2.1. Personnel exposure levels								B	B	-	-
A2.18.2.2.2. Use radiation detection devices	*							2c	b	-	-
A2.18.2.2.3. Protection requirements								B	B	-	-
A2.18.2.2.4. Use radiation hazard markings/warning devices	*							2c	b	-	-
A2.18.3. Fundamentals of Silver Recovery								A	B	-	-
A2.18.4. Precious Metals Recovery Program								A	B	-	-
A2.18.5. Inspect Parts											
A2.18.5.1. Set up equipment/film	*							2b	b	-	-
A2.18.5.2. Film Selection								2b	B	-	-
A2.18.5.3. Use image quality indicators								2b	b	-	-
A2.18.5.4. Use image quality enhancers								2b	b	-	-
A2.18.5.5. Make exposure corrections								2b	b	-	-
A2.18.5.6. Develop film	*							2b	b	-	-
A2.18.5.7. Perform exposures	*							2b	b	-	-
A2.18.6. Interpret Indications											
A2.18.6.1 Cracks	*							2b	a	-	-
A2.18.6.2 Water Entrapment	*							2b	a	-	-
A2.18.6.3 Foreign Objects	*							2b	a	-	-
A2.18.6.4 Weld Certification Specimens Ref TO 00-25-252		*						-	a	-	-

# SPECIALTY TRAINING STANDARD

CFETP 2A7X2, 1 October 2010

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used to Indicate Training/Information Provided (See Atch 1)			
	A	B	A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.18.7. Operator Maintenance								A	B	-	-
A2.18.8. Perform Process Control	*							2b	b	-	-
A2.19. COMPUTED RADIOGRAPHY											
A2.19.1. Fundamentals								A	B	-	-
A2.19.2. Operate Equipment	*							-	b	-	-
A2.19.3. Interpret Indications											
A2.19.3.1. Cracks	*							-	a	-	-
A2.19.3.2. Water Entrapment	*							-	a	-	-
A2.19.3.3. Foreign Objects	*							-	a	-	-
A2.19.3.4. Weld Certification Specimens		*						-	a	-	-
A2.19.4. Operator Maintenance									-	-	-
A2.19.5. Perform Process Control	*							-	b	-	-
A2.19.6. OTHER INSPECTION METHODS											
A2.19.6.1. Infrared Thermography								-	A	-	-
A2.19.6.2. Shearography								-	A	-	-
A2.19.6.3. Magneto Optic Inspection (MOI)								-	A	-	-
A2.19.6.4. Mobile Automated Scanner Systems (MAUSS)								-	A	-	-
A2.20. TECHNIQUE DEVELOPMENT TR: TO 33B-1-1, AFTO 242											
A2.20.1. Select Inspection Method		*						-	b	-	-
A2.20.2. Develop Inspection Method		*						-	b	-	-
A2.20.3. Record Inspection Technique		*						-	b	-	-
A2.21. SPECTROMETRIC OIL ANALYSIS TR: AF1 21-124; TOs 33-1-37, applicable equipment TOs											
A2.21.1. Aircraft Engine Familiarization								-	-	-	-
A2.21.2. Fundamentals of Oil Analysis								B	B	-	-
A2.21.3. Standardize Atomic Emission (AE) Spectrometer	*							2b	b	-	-
A2.21.4. Operate Atomic Emission (AE) Spectrometer	*							2b	b	-	-
A2.21.5. Evaluate Trends	*							2b	a	-	-
A2.21.6. Fundamentals of Data Automation								B	B	-	-
A2.21.7. Perform Operator Maintenance on Atomic Emission (AE) Spectrometer	*							2b	b	-	-
A2.21.8. Fundamentals of the Correlation Program								B	B	-	-

# SPECIALTY TRAINING STANDARD

CFETP 2A7X2, 1 October 2010

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used to Indicate Training/Information Provided (See Atch 1)			
	A	B	A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.21.9. Analyze Correlation Samples	*							-	b	-	-
A2.21.10. Prepare Correlation Results	*							-	b	-	-
A2.21.11. Analyze Deployment Kits	*							-	b	-	-
A2.21.12. Certification Program TR: TOs 33-1-37-1 and 33-1-37-2								B	B	-	-
A2.21.13. SEM/EDX Fundamentals TR: TO 33D4-6-802-CD-1 (JetSCAN); TO 33D4-6-804-1-CD-1 (ASPEX)								-	A	-	-
A2.21.14. Operate SEM/EDX Equipment TR: TO 33D4-6-802-CD-1 (JetSCAN); TO 33D4-6-804-1-CD-1 (ASPEX)											
A2.21.14.1. JetSCAN	*							-	-	-	-
A2.21.14.2. ASPEX	*							-	-	-	-
A2.21.15. SEM/EDX Equipment Operator Maintenance TR: TO 33D4-6-802-CD-1 (JetSCAN); TO 33D4-6-804-1-CD-1 (ASPEX)											
A2.21.15.1. JetSCAN	*							-	-	-	-
A2.21.15.2. ASPEX	*							-	-	-	-
A2.22. GENERAL MAINTENANCE/ PRODUCTION TEAM TASKS TR: Applicable Aircraft TOs											
A2.22.1. Flightline/Safety/Precautions/Security								-	-	-	-
A2.22.2. Introduction to Aircraft/Airframe Familiarization/Egress								-	-	-	-
A2.22.3. Inspect/Use Ground Maintenance Stand								-	-	-	-
A2.22.4. Dropped Object Prevention Program (DOPP)								-	-	-	-
A2.22.5. Defensive System (DS) familiarization (on applicable aircraft)								-	-	-	-
A2.22.6. Statically Ground Aircraft								-	-	-	-
A2.22.7. Inspect/Operate Portable External Electrical Power Unit								-	-	-	-
A2.22.8. Apply/Disconnect External Electrical Power								-	-	-	-
A2.23. TOW AIRCRAFT											
A2.23.1. Perform Wing/Tail Walker Duties								-	-	-	-
A2.23.2. Brake Operator								-	-	-	-

# SPECIALTY TRAINING STANDARD

CFETP 2A7X2, 1 October 2010

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used to Indicate Training/Information Provided (See Atch 1)			
	A	B	A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course
A2.24. PERFORM REFUEL/DEFUEL TEAM MEMBER DUTIES											
A2.24.1. Fireguard								-	-	-	-
A2.24.2. Panel Operator								-	-	-	-
A2.24.3. Open and Close Engine Cowling								-	-	-	-
A2.24.4. Remove/Install Aircraft Maintenance Access Panels								-	-	-	-
A2.24.5. Use Aircraft Interphone System								-	-	-	-
A2.24.6. Perform Aircraft Marshaling Procedures								-	-	-	-
A2.25. AIRCRAFT SAFE FOR MAINTENANCE								-	-	-	-
A2.26. WEAPONS SAFETY								-	-	-	-

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# 2AX7X Specialty Training Standard

## AEROSPACE MAINTENANCE CRAFTSMAN

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	(1) Crse	(1) CDC	(1) Crse	(2) CDC
NOTE 1: Users are responsible for annotating training references to identify current references pending STS revision.				
NOTE 2: This attachment is to be used in conjunction with other attachments in applicable CFETPs.				
NOTE 3: Personnel must complete CDC requirements on all MDSs/attachments.				
NOTE 4: This attachment is to be used as a correlation document for the 2AX7X 7-level Aerospace Maintenance Craftsman CDC's.				
NOTE 5: All items are SUBJECT KNOWLEDGE LEVELS only and require no certification on this STS.				
AA.1. MAINTENANCE PHILOSOPHY AND POLICY				
AA.1.1. Aircraft and Equipment Readiness TR: AFI 21-101 and Repair Enterprise 21 Fact Sheet ( <a href="https://acc.dau.mil/CommunityBrowser.aspx?id=32781">https://acc.dau.mil/CommunityBrowser.aspx?id=32781</a> )				A
AA.1.2. Maintenance Concept TR: AFI 21-101 and AFI 21-129				A
AA.1.3. Reliability and Maintainability (R&M) TR: AFI 21-101, AFI 21-118 and TO 00-35D-54.				A
AA.1.4. Operating Instructions (OI) TR: AFI 21-101 and AFI 33-360				A
AA.1.5. Support Agreements (SA) TR: AFI 21-101 and AFI 25-201				A
AA.1.6. Modification and Configuration Management TR: AFI 21-101				A
AA.1.7. Maintenance Information Systems (MIS) TR: AFI 21-101, AFI 21-116, AFCSM 21-556 volume 2, and TO 00-20-2				B
AA.1.8. Maintenance Performance Indicator Metrics and Health of the Fleet TR: AFI 21-101 and AFI 21-103				B
AA.1.9. Personnel Utilization TR: AFI 21-101				A
AA.1.10. Maintenance Repair Priorities TR: AFI 21-101				A
AA.1.11. Minimum Essential System Listing (MESL) TR: AFI 21-101 and AFI 21-103				A
AA.1.12. Status of Resources and Training System (SORTS), and AEF Reporting Tool (ART) TR: AFI 10-201, AFI 10-244 and <a href="https://aefcenter.afpc.randolph.af.mil/">https://aefcenter.afpc.randolph.af.mil/</a>				A
AA.1.13. Historical Aircraft and Equipment Records TR: AFI 21-101 and T.O. 00-20-1				A
AA.1.14. Maintenance Scheduling Effectiveness TR: AFI 21-101				A
AA.2. MAINTENANCE ORGANIZATION KEY LEADER RESPONSIBILITIES				
AA.2.1. Wing Commander (WG/CC) TR: AFI 21-101 and AFI 38-101				A
AA.2.2. Wing Vice Commander (WG/CV) TR: AFI 21-101 and AFI 38-101				A
AA.2.3. Maintenance Group Commander (MXG/CC) TR: AFI 21-101 and AFI 38-101				A
AA.2.4. Maintenance Group Deputy Commander (MXG/CD) TR: AFI 21-101				A
AA.2.5. MXG Superintendent (SUPT) TR: AFI 21-101				A

# 2AX7X Specialty Training Standard

## AEROSPACE MAINTENANCE CRAFTSMAN

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES		4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
		A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
		(1) Crse	(1) CDC	(1) Crse	(2) CDC
AA.2.6.	Squadron Commander (SQ/CC) Responsibilities TR: AFI 21-101				A
AA.2.7.	Operations Officer and Maintenance Superintendent (MX SUPT) Responsibilities TR: AFI 21-101				A
AA.2.8.	Flight Commander/Flight Chief TR: AFI 21-101				A
AA.2.9.	AMU OIC/Superintendent (SUPT) TR: AFI 21-101				A
AA.2.10.	Section NCOIC TR: AFI 21-101				A
AA.2.11.	Production Superintendent (Pro Super) TR: AFI 21-101				A
AA.2.12.	Expediter TR: AFI 21-101				B
AA.3.	FUNCTIONS OF MAINTENANCE OPERATIONS SQUADRON (MOS) TR: AFI 21-101 and AFI 38-101				
AA.3.1.	Maintenance Operations Flight (MOF) TR: AFI 21-101				A
AA.3.2.	Maintenance Training Flight (MTF) TR: AFI 21-101 and AFI 36-2232				A
AA.3.3.	Programs and Resources Flight TR: AFI 21-101				A
AA.3.4.	Quality Assurance (QA) Flight TR: AFI 21-101				A
AA.4.	FUNCTIONS OF AIRCRAFT/HELICOPTER MAINTENANCE SQUADRON (AMXS/HMXS) TR: AFI 21-101 and AFI 38-101				
AA.4.1.	Aircraft Maintenance Unit (AMU) TR: AFI 21-101				A
AA.4.2.	Aircrew and Maintenance Debrief Section TR: AFI 21-101				A
AA.4.3.	Aircraft Section TR: AFI 21-101				A
AA.4.4.	Specialist Section TR: AFI 21-101				A
AA.4.5.	Weapons Section TR: AFI 21-101				A
AA.4.6.	Plans, Scheduling and Documentation Section (PS&D) TR: AFI 21-101				A
AA.4.7.	Support Section TR: AFI 21-101				A
AA.5.	FUNCTIONS OF MAINTENANCE SQUADRON (MXS) TR: AFI 21-101 and AFI 38-101				
AA.5.1.	Accessories Flight TR: AFI 21-101				A
AA.5.2.	Aerospace Ground Equipment (AGE) Flight TR: AFI 21-101				A
AA.5.3.	Armament Flight TR: AFI 21-101				A
AA.5.4.	Avionics Flight TR: AFI 21-101				A
AA.5.5.	Fabrication Flight TR: AFI 21-101				A

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1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES		4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
		A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
		(1) Crse	(1) CDC	(1) Crse	(2) CDC
AA.5.6.	Maintenance Flight TR: AFI 21-101				A
AA.5.7.	Munitions Flight TR: AFI 21-101 and AFI 21-201				A
AA.5.8.	Propulsion Flight TR: AFI 21-101				A
AA.5.9.	Test, Measurement, and Diagnostic Equipment (TMDE) Flight TR: AFI 21-101				A
AA.6.	AIR FORCE MATERIEL COMMAND RESPONSIBILITIES				
AA.6.1.	Air Logistics Centers (ALC) TR: AFMCMC (Mission Directives) 406, 407 and 410. Located at: <a href="https://www.afmc-mil.wpafb.af.mil/pdl/afmc/md.htm">https://www.afmc-mil.wpafb.af.mil/pdl/afmc/md.htm</a> , OO-ALC Brochure located at: <a href="http://www.hill.af.mil/main/index.html">http://www.hill.af.mil/main/index.html</a> , WR-ALC: <a href="http://www.robins.af.mil/units/402mw.asp">http://www.robins.af.mil/units/402mw.asp</a> and OC-ALC: <a href="http://www.tinker.af.mil/units/">http://www.tinker.af.mil/units/</a>				A
AA.6.2.	Air Force Flight Test Center/Air Armament Center TR: AFMCMC 404 located at: <a href="https://www.afmc-mil.wpafb.af.mil/pdl/afmc/md.htm">https://www.afmc-mil.wpafb.af.mil/pdl/afmc/md.htm</a> and Flight Test Center Fact Sheet locate at: <a href="http://www.edwards.af.mil/library/factsheets/factsheet_print.asp?fsID=6573&amp;page=1">http://www.edwards.af.mil/library/factsheets/factsheet_print.asp?fsID=6573&amp;page=1</a>				A
AA.6.3.	Aerospace Maintenance and Regeneration Center (AMARC) TR: AFMCMC 415 located at: <a href="https://www.afmc-mil.wpafb.af.mil/pdl/afmc/md.htm">https://www.afmc-mil.wpafb.af.mil/pdl/afmc/md.htm</a> and <a href="http://www.dm.af.mil/units/amarc.asp">http://www.dm.af.mil/units/amarc.asp</a>				A
AA.7.	MAINTENANCE TRAINING				
AA.7.1	Types of Training TR: AFI 36-2232 and the ETCA site located at: <a href="https://etca.randolph.af.mil/">https://etca.randolph.af.mil/</a>				A
AA.7.2.	Training Documentation TR: AFI 36-2232, AFI 21-101, and AFI 36-2201				A
AA.7.3.	Special Certification Rosters TR: AFI 21-101				A
AA.7.4.	Maintenance Qualification Program (MQP) TR: AFI 36-2232, AFI 21-101 and AFTTP 3-21.1				A
AA.7.5.	Training Forecast / Request TR: AFI 36-2232 and AFI 21-101				A
AA.7.6.	Training Development Process TR: AFI 36-2232, AFI 21-101, and AETCI 36-2601				A
AA.8.	PERSONNEL RESOURCE MANAGEMENT				
AA.8.1.	Capability Based Manpower Standard and Logistics Composite Model (LCOM) TR: AFMAN 38-208 Volume 3, AFI 38-201, AFI 21-101 and AFTTP 3-21.1				A
AA.8.2.	Unit Manpower Document (UMD) and Unit Personnel Manpower Roster (UPMR) TR: AFI 38-201, AFTTP 3-21.1 and AFI 36-2110				A
AA.9.	MAINTENANCE SUPPLY				
AA.9.1.	Logistics Readiness Squadron (LRS) Supply Support TR: AFI 21-101, AFMAN 23-110 (vol. 1) and AFTTP 3-21.1				A
AA.9.2.	Readiness Spares Packages TR: AFMAN 23-110, AFI 21-101 and AFTTP 3-21.1				A
AA.9.3.	Consumables Management TR: AFI 21-101, AFTTP 3-21.1 and AFMAN 23-110				A
AA.9.4.	Equipment Items TR: AFI 21-101, AFMAN 23-110 and AFMAN 23-220				A



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		A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
		(1) Crse	(1) CDC	(1) Crse	(2) CDC
AA.9.5.	Special Purpose Recoverable Authorized Maintenance (SPRAM) Assets TR: AFI 21-101, AFMAN 23-110 and AFI 21-103				A
AA.9.6.	Supply Assets Requiring Functional Check, Calibration, or Operational Flight Programming TR: AFI 21-101 and AFMAN 23-110				A
AA.9.7.	Precious Metals Recovery Program TR: AFMAN 23-110 and AFI 21-101				A
AA.9.8.	Supply Points TR: AFI 21-101 and AFMAN 23-110				A
AA.9.9.	Local Manufacture TR: AFI 21-101				A
AA.9.10.	Repair Cycle Assets / Supply Management Products TR: AFI 23-110 and AFI 21-101				A
AA.9.11.	Tail Number Bins (TNB) TR: AFI 21-101				A
AA.9.12.	Maintenance Repair / Supply Delivery Priorities TR: AFI 21-101				A
AA.9.13.	Classified Assets TR: AFI 21-101 and TO 00-20-1				A
AA.9.14.	Hazardous Materials TR: AFI 90-821, AFI 32-7086 and AFI 21-101				A
AA.9.15.	Supply Deficiency and Discrepancy Reporting TR: AFI 23-110 and AFI 21-101				B
AA.10.	TECHNICAL ORDER POLICY TR: TO 00-5-1, AFI 21-101, AFI 21-303				
AA.10.1.	Use of Technical Orders (TO), TO Supplements and Publications TR: AFI 21-101, 21-303 and AFTTP 3-21.1				A
AA.10.2.	Technical Order Change Process TR: AFI 21-303				A
AA.10.3.	Technical Order Waivers TR: AFI 21-303 and AFI 21-101				A
AA.11.	MAINTENANCE REQUIREMENTS AND PROGRAMS				
AA.11.1.	Cannibalization Program TR: AFI 21-101 and AFTTP 3-21.1				A
AA.11.2.	Restricted Maintenance Areas TR: AFI 21-101				A
AA.11.3.	Red Ball Maintenance TR: AFI 21-101 and AFTTP 3-21.1				A
AA.11.4.	Aircraft/Equipment Impoundment Program TR: AFI 21-101				A
AA.11.5.	Maintenance Standardization and Evaluation Program (MSEP) Purpose and Inspection Types TR: AFI 21-101 and AFTTP 3-21.1				B
AA.11.6.	Foreign Object Damage (FOD) Program TR: AFI 21-101, AFI 36-2232 and AFTTP 3-21.1				A
AA.11.7.	Dropped Object Prevention (DOP) Program TR: AFI 21-101				A
AA.11.8.	Tool Management TR: AFI 21-101 and AFTTP 3-21.1				A
AA.11.9.	Tool Accountability TR: AFI 21-101 and AFTTP 3-21.1				A
AA.11.9.1.	Marking and Tool Identification TR: AFI 21-101				A

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1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	(1) Crse	(1) CDC	(1) Crse	(2) CDC
AA.11.9.2. Locally Manufactured, Developed, or Modified Tools and Equipment TR: AFI 21-101				A
AA.11.9.3. Lost Item/Tool Procedures TR: AFI 21-101				A
AA.11.10. Maintenance Recovery Team TR: AFI 21-101				A
AA.11.11. Aging Aircraft / Equipment Issues TR: AFI 21-101, DoD 5010.12-M and DMSMS Guide Book (SD-22)				A
AA.11.12. Quality Assurance Evaluators TR: AFI 21-101 and AFTTP 3-21.1				A
AA.11.13. Computer Applications TR: AF Portal, AF E-Publishing site, AF IT E-Learning site, Advanced Distributed Learning Services (ADLS) site, AF Center of Excellence for Knowledge Management (AFKM) site, Defense Travel System (DTS) training site, Air & Space Expeditionary Force Center site and the AF Center for Electronic Distribution of Systems (AFCEDS) site				A
AA.11.14. Mobility TR: AFTTP 3-21.1, AFI 10-403, AFI 21-101, and the AFMAN 10-100 (Airman's Manual)				A
AA.11.15. Crashed Damaged or Disabled Aircraft Recovery (CDDAR) Program TR: AFI 21-101				A